AUTODOC CLUB

How to change engine thermostat on **AUDI A6 Avant (4B5, C5)** – replacement guide

SIMILAR VIDEO TUTORIAL

This video shows the replacement procedure of a similar car part on another vehicle

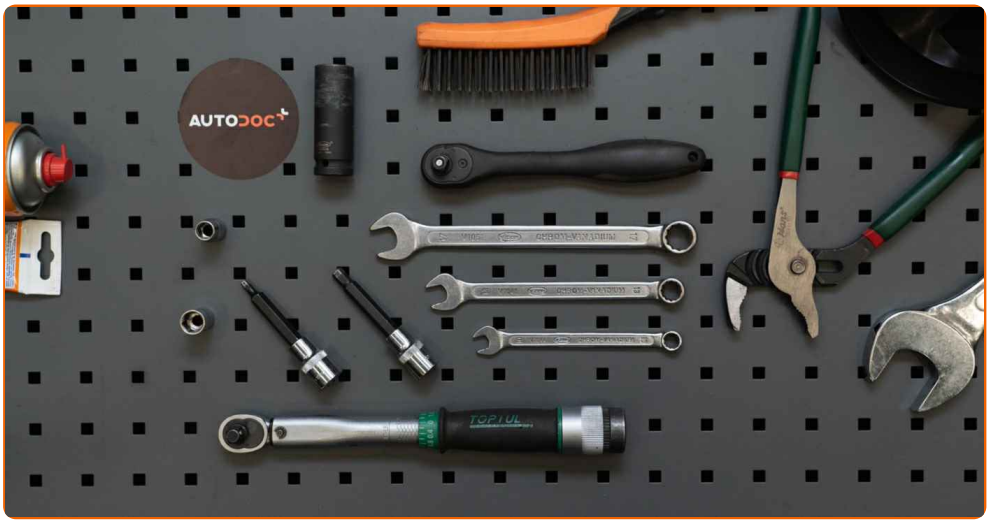
Important!

This replacement procedure can be used for:
AUDI A6 Avant (4B5, C5) 1.8, AUDI A6 Avant (4B5, C5) 1.8 T, AUDI A6 Avant (4B5, C5) 1.8 T quattro

The steps may slightly vary depending on the car design.

This tutorial was created based on the replacement procedure for a similar car part on: AUDI A4 Saloon (8D2, B5) 1.6

REPLACEMENT: ENGINE THERMOSTAT – AUDI A6 AVANT (4B5, C5). TOOLS YOU MIGHT NEED:



- Wire brush
- All-purpose cleaning spray
- Electronic spray
- Sealant
- Torque wrench
- Combination spanner #10
- Combination spanner #13
- Combination spanner #17
- Combination spanner #46
- Drive socket # 10
- Drive socket # 13
- HEX bit No.H5
- HEX bit No.H8
- Ratchet wrench
- Funnel
- Fluid container
- Pincers
- Fender cover

Buy tools

Replacement: engine thermostat – AUDI A6 Avant (4B5, C5). AUTODOC experts recommend:

- Check the condition of the coolant every time you replace the thermostat. Change the coolant if necessary.
- All work should be done with the engine stopped.

CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

1 Open the hood.

2 Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.

3 Unscrew the engine cover fastener. Use HEX No.H5. Use a ratchet wrench.

4 Remove the engine cover.

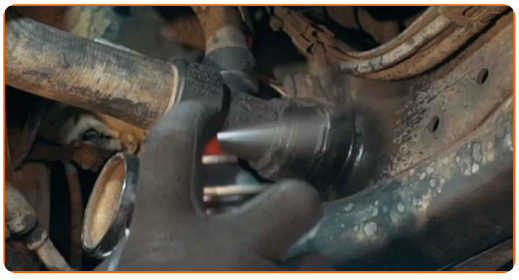
AUTODOC recommends:

- Replacement: engine thermostat – AUDI A6 Avant (4B5, C5). Do not use excessive force when removing the part as this may damage it.

5 Unscrew the coolant reservoir cap.

6 Prepare a container for fluids.

7 Clean the coolant hose. Use all-purpose cleaning spray.



8 Disconnect the coolant pipe retaining clip.

9 Detach the coolant hose.

Replacement: engine thermostat – AUDI A6 Avant (4B5, C5). Professionals recommend:

- Caution! Coolant may leak out of the coolant lines and thermostat housing.

10 Drain the coolant from the engine.

Replacement: engine thermostat – AUDI A6 Avant (4B5, C5). Tip:

- Caution! The coolant can be very hot.
- Wear gloves to prevent contact with hot liquid.
- All work should be done with the engine stopped.
- Wait until the coolant has completely flowed out of the drain hole.

11 Clean the coolant hose. Use all-purpose cleaning spray.

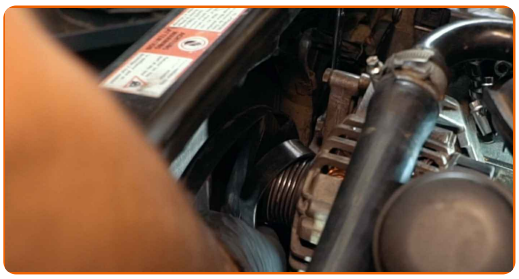
12 Attach the coolant hose.

13 Connect the coolant pipe retaining clip.

14 Clean the coolant hose. Use all-purpose cleaning spray.

15 Pull aside the V-ribbed belt tensioner pulley. Use a combination spanner #17.

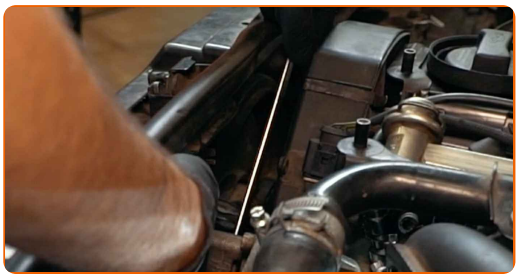
16 Remove the V-ribbed belt.



Replacement: engine thermostat – AUDI A6 Avant (4B5, C5). Tip from AUTODOC:

- Check the condition of the tensioner pulley and idler pulley. Replace them if necessary.

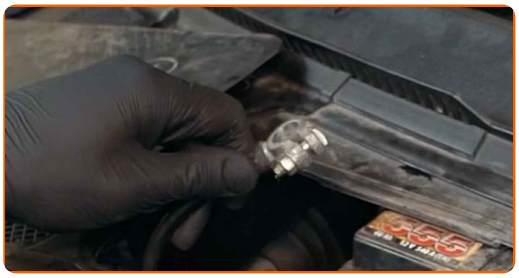
17 Return the tensioner pulley to its initial position.



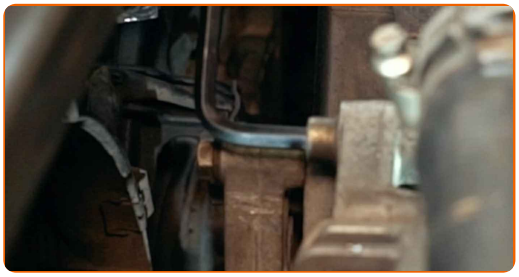
18 Remove the battery cover.

19 Unscrew the fasteners of the car battery terminals. Use a combination spanner #10.

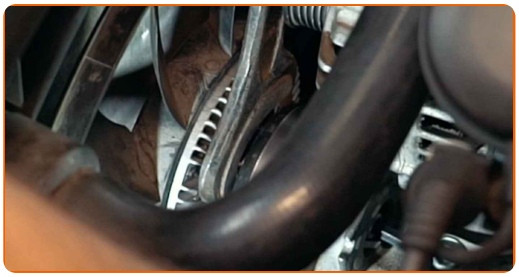
20 Remove the battery terminals.



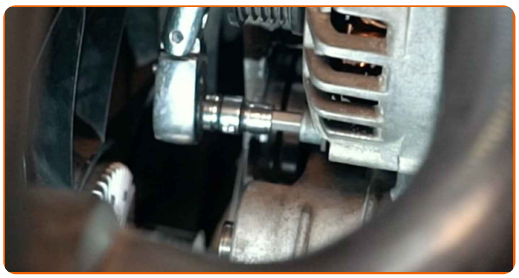
21 Loosen the alternator fasteners. Use HEX No.H8.



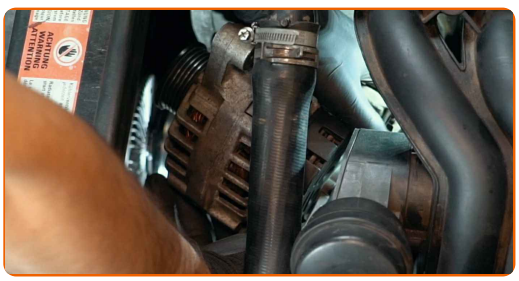
22 Unscrew the fastener of the viscous fan clutch. Use a combination spanner #46. Use HEX No.H8.



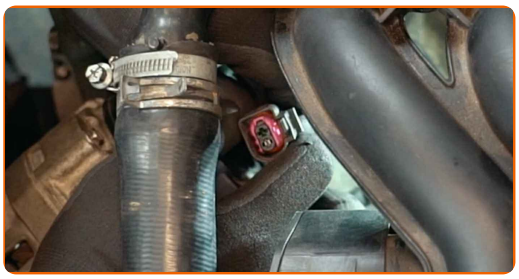
23 Loosen the alternator fasteners. Use HEX No.H8.



24 Remove the alternator.

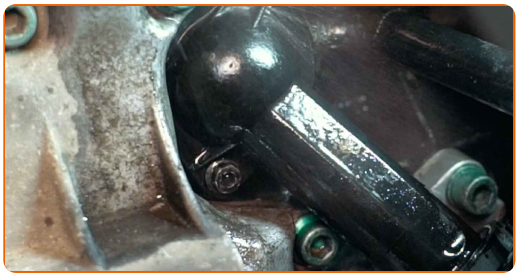


25 Disconnect the alternator connector.

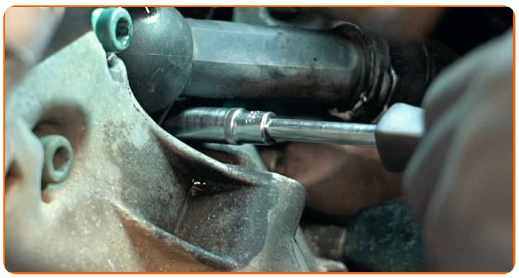


26 Unscrew the alternator power cable fastener. Use a combination spanner #13.

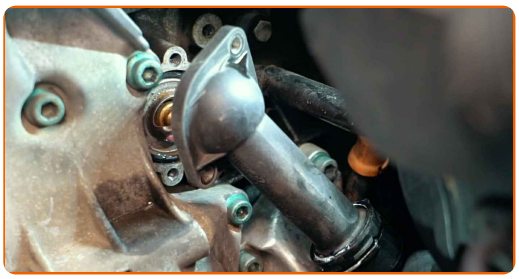
27 Clean the thermostat housing. Use all-purpose cleaning spray.



28 Unscrew the thermostat housing fasteners. Use a drive socket #10. Use a ratchet wrench.



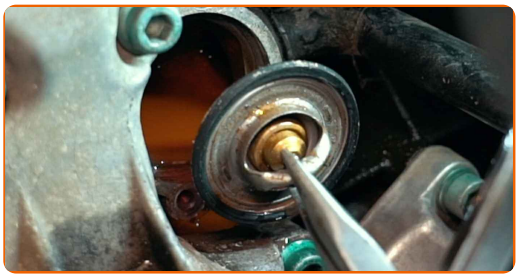
29 Remove the thermostat housing.



AUTODOC recommends:

- Replacement: engine thermostat – AUDI A6 Avant (4B5, C5). Do not use excessive force when removing the part as this may damage it.

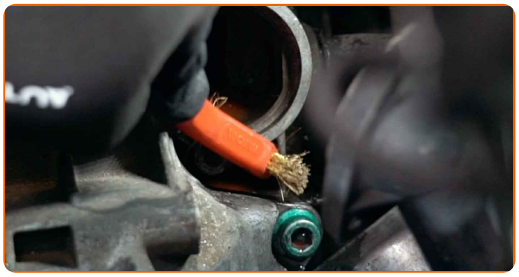
30 Remove the thermostat. Use pincers.



Replacement: engine thermostat – AUDI A6 Avant (4B5, C5). Tip:

- Do not apply excessive force when removing the part. Otherwise you may damage it.
- Caution! Coolant may leak out of the coolant lines and thermostat housing.

31 Clean the thermostat housing mounting seat. Use a wire brush. Use all-purpose cleaning spray.

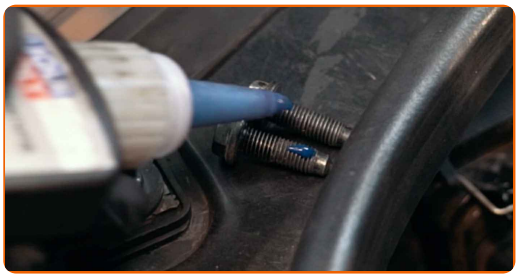


32 Install a new thermostat.

AUTODOC recommends:

- Replacement: engine thermostat – AUDI A6 Avant (4B5, C5). Do not use excessive force during installation. This may damage the part.

33 Treat the thermostat housing. Use a sealant.

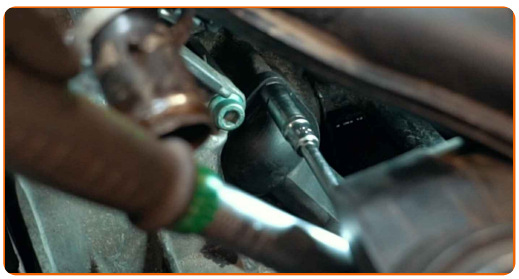


34 Install the thermostat housing.

Replacement: engine thermostat – AUDI A6 Avant (4B5, C5). Tip from AUTODOC:

- When installing, do not use excessive force to avoid damage to the part.

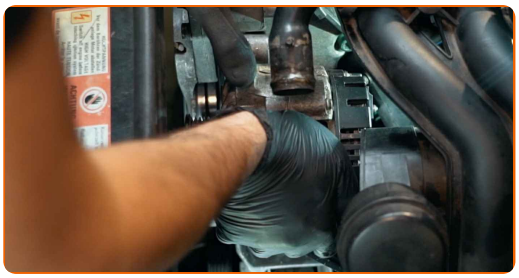
35 Tighten the thermostat housing fasteners. Use a drive socket #10. Use a torque wrench. Tighten it to 6 nm torque.



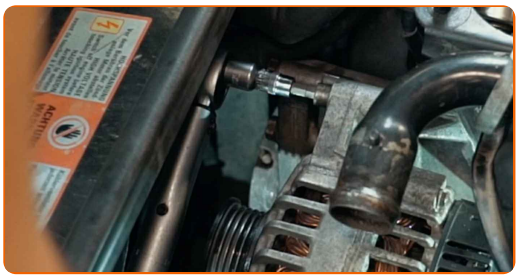
36 Tighten the alternator power cable fastener. Use a drive socket #13. Use a torque wrench. Tighten it to 5 nm torque.

37 Connect the alternator connector.

38 Install the alternator.

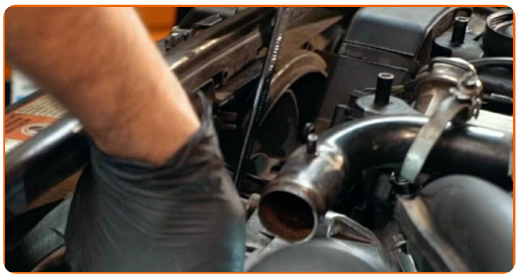


39 Tighten the alternator fasteners. Use HEX No.H8. Use a torque wrench. Tighten it to 8 nm torque.



40 Tighten the fastener of the viscous fan clutch. Use a combination spanner #46. Use HEX No.H8. Use a torque wrench. Tighten it to 24 nm torque.

41 Pull aside the V-ribbed belt tensioner pulley. Use a combination spanner #17.



42 Install the V-ribbed belt.

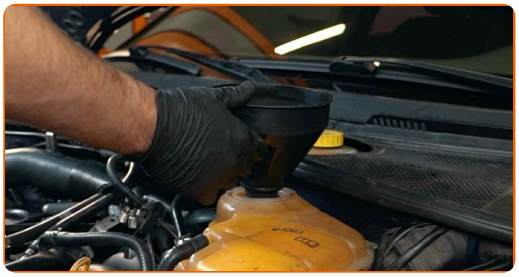
Replacement: engine thermostat – AUDI A6 Avant (4B5, C5). AUTODOC experts recommend:

- Check the condition of the tensioner pulley and idler pulley. Replace them if necessary.

43 Return the tensioner pulley to its initial position.

44 Remove the coolant reservoir cap.

45 Insert the funnel.



46 Pour coolant in the coolant reservoir.

Replacement: engine thermostat – AUDI A6 Avant (4B5, C5). AUTODOC recommends:

- Only use the coolant recommended by the manufacturer.
- The coolant level should be at the MAX mark.
- Wait until the air goes out of the system.

47 Attach the terminals to the battery.

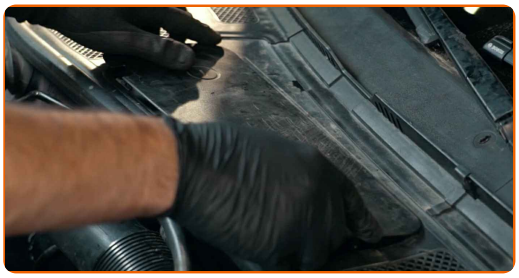
Replacement: engine thermostat – AUDI A6 Avant (4B5, C5). Tip from AUTODOC:

- Be careful! Do not mix up the positive and the negative terminals of the car battery.

48 Screw in the fasteners of the battery terminals. Use a combination spanner #10.

49 Treat the battery terminals. Use dielectric grease.

50 Install the battery cover.



51 Run the engine for a few minutes. This should be done in order to remove residual air from the cooling system and to check if the components are operating correctly.

52 Shut off the engine.

53 Install the coolant reservoir cap.

54 Screw on the coolant reservoir cap.

55 Install the engine cover and secure it.

AUTODOC recommends:

- Replacement: engine thermostat – AUDI A6 Avant (4B5, C5). Do not use excessive force during installation. This may damage the part.

56 Screw in the engine cover fasteners. Use HEX No.H5. Use a ratchet wrench.

57 Check the coolant level. If necessary, top up to the required level.

58 Remove the fender protection cover.

59 Close the hood.

WELL DONE!

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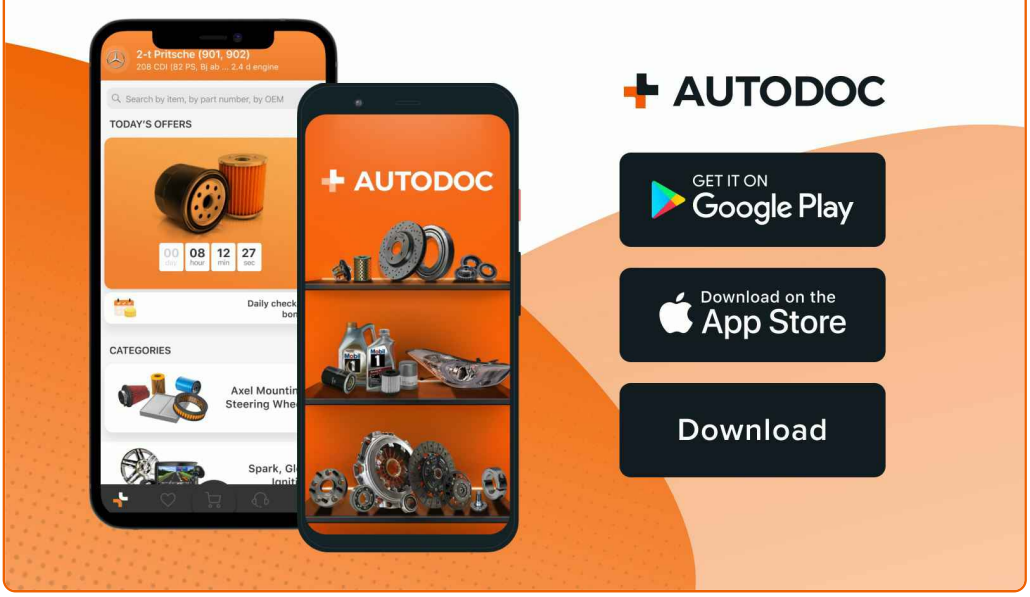

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ENGINE THERMOSTAT: A WIDE SELECTION

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